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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,104	08/13/2001	Joachim Pohler	HMN-2-0016	9007

7590 05/19/2003
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EXAMINER

GRIFFIN, WALTER DEAN

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 05/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/831,104

Applicant(s)

POHLER ET AL

Examiner

Walter D. Griffin

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The claim rejections under 35 U.S.C. 112 and 103 as described in paper no. 8 have been withdrawn in view of the amendment filed on March 6, 2003 and remarks contained therein.

Arguments that are no longer relevant will not be addressed.

New rejections follow.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because the reference to the claiming the benefit under Title 35, United States, 120 of the PCT international application appears to be incorrect. This application is filed under 35 USC 371.

The examiner notes that applicants have stated that a new declaration will be submitted shortly. This objection is repeated since the new declaration has not been received yet.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (US 4,360,420) in view of Forsberg (US 4,154,670).

The Fletcher reference discloses a process for reprocessing waste oil by initially distilling the oil at a temperature ranging from 220° to 400°F (104° to 204°C) to remove a volatile forecut, water, gasoline, and the like. The residue oil resulting from this initial distillation is then distilled in a second step under a reduced pressure to form a fuel oil fraction and a residue fraction containing oil of lubricating viscosity. This residue fraction containing oil of lubricating viscosity is then distilled to remove lube oil fractions. Thin film evaporators may be used in the distillation steps. These lube oil fractions are then solvent extracted in an extraction column. See col. 2, line 17 through col. 3, line 23; col. 3, line 64 through col. 4, line 68; col. 5, lines 54-66; col. 6, lines 45-61; and col. 7, lines 9-13.

The Fletcher reference does not disclose the use of NMP or NMF as the extraction solvents.

The Forsberg reference discloses that impurities can be removed from oils by extracting the impurities with a solvent. Examples of useful solvents include N-(lower alkyl)-2-pyrrolidones and morpholine derivatives. See col. 2, lines 9-61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Fletcher by utilizing the solvents of Forsberg instead of the disclosed solvent because the solvents of Forsberg will extract impurities from used oil.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (US 4,360,420) in view of Forsberg (US 4,154,670) as applied to claim 1 above, and further in view of Habiby et al. (4,021,333).

The previously discussed references do not disclose an alkaline treatment.

The Habiby reference discloses a preliminary alkaline treatment of a used oil that is subsequently distilled and solvent extracted. The alkaline material may be potassium hydroxide and is added to the oil as an alkaline solution. The alkaline solution is typically 5 to 20% alkali by weight. Using this solution would necessarily provide an alkalinity reserve. See col. 3, line 57 through col. 4, line 7.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the previously discussed references by including an alkaline treatment as suggested by Habiby because metallic constituents of the used oil will be removed from the oil.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have added the alkaline solution during distillation because the alkaline treatment is conducted at elevated temperatures. Therefore, one would expect the alkaline treatment to achieve the desired results if the alkaline solution is added during the distillation since the distillation is conducted at elevated temperatures.

Response to Arguments

The argument that the combination of Habiby with the other references fails to render claims 2-6 obvious because the treatment with the alkaline solution is prior to distillation is not persuasive because, as stated above, the alkaline treatment of Habiby is conducted at elevated temperatures. Since distillation is conducted at elevated temperatures, one would expect the alkaline treatment to be effective if it is performed during the distillation.

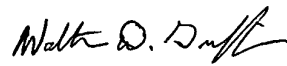
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is 703-305-3774. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
May 15, 2003